ART 34 AMDT

New claims

1. Radiation imaging device with a radiation source and a digital radiation receiver, which can be moved vertically to be positioned in relation to a standing patient, and with an image processing device for producing an image that can be output based on the recorded image data,
characterized in that
to record an examination area exceeding the height of the active area of the digital radiation receiver (3), the radiation source (2) and radiation receiver (3) can be moved in a controlled manner to successive imaging positions (I, II, III) by means of a control device (10), which is configured for automatic determination of the respective positions (I, II, III) based on the height of the examination area and the height of the active area of the radiation detector (3), one radiation image (B1, B2, B3) being recorded in said positions in each instance, the positions (I, II, III) being defined such that the recorded radiation images (B1, B2, B3) cover the examination area and the image processing device (11) being configured to produce an overall image (G) representing the entire examination area based on the image data of the individual radiation images (B1, B2, B3).

2. Radiation imaging device according to Claim 1, characterized in that the radiation source (2) and the radiation receiver (3) can be moved synchronously.

3. Radiation imaging device according to Claim 1 or 2, characterized in that the movement from one recording position (I, II, III) to the next and imaging in the respective

recording position (I, II, III) take place automatically.

4. Radiation imaging device according to one of Claims 1 to 3,
characterized in that the positions are defined such that two successively recorded images (B1, B2, B3) overlap at the edges.

5. Radiation imaging device according to one of Claims 1 to 3,
characterized in that the positions (I, II, III) are defined such that two successively recorded images (B1, B2, B3) are essentially directly adjacent to each other.

6. Radiation imaging device according to Claim 4 or 5, characterized in that the image processing device (11) is configured to line up two successively recorded images (B1, B2, B3) by analyzing the areas of overlap (Ü1, Ü2) or by analyzing the images (B1, B2, B3) in the edge area to be lined up and by subsequent alignment of the images (B1, B2, B3).

7. Radiation imaging device according to one of Claims 1 to 6,
characterized in that the overall image (G) can be output if necessary in a reduced format as a hard copy or on a monitor (12).

8. Radiation imaging device according to one of Claims 1 to 7,
characterized in that the overall image (G) can be output on a monitor (12) in the recorded format or a larger format and can be moved on the monitor (12) by scrolling.

9. Radiation imaging device according to one of Claims 1 to 8,
characterized in that the radiation source (2) and radiation receiver (3) are arranged on, if necessary telescopic, ceiling or floor gantries (4, 6).

10. Radiation imaging device according to one of Claims 1 to 9,
characterized in that a platform (7) holding the patient (P) is provided with retaining devices (8) for the patient.

11. Radiation imaging device according to Claim 10,
characterized in that the retaining devices are configured as handles (8).

12. Radiation imaging device according to Claim 10 or 11,
characterized in that a radiation-transparent plate (9) is arranged on the platform (7) on the side facing the radiation receiver (3).